

Remarks

The Examiner's numbered paragraphs are referred to.

Claims Objections

As regards Examiner's paragraph 1, various relatively-minor clarifying amendments have been made to the wording of claim 6 and some formatting amendments made so as to aid readability. Claim 6 includes distinct structural elements including a detection system, a first comparator and a second comparator. Accordingly, claim 6 is not a "preamble with no body".

Objections to the Specification

As regards Examiner's paragraph 2, "a decoder for receiving encoded video signals produced by an encoder is a transmitter, the encoder being selectively operative to transmit" is taught on page 2 lines 4 to 5.

Furthermore, "a mode indicator signal indicative of whether or not the last macroblock was encoded in inter-frame prediction format or not" is disclosed on page 2 lines 9 to 10, read in the light of page 3 lines 9 to 11 (which talks of the two modes: one with and one without interframe prediction), and also page 3 lines 17 to 18 where the term "mode indicator signal" is explicitly mentioned.

The disclosure of the specification is addressed to any person skilled in this field and enables such a person to make and use the invention.

Claims Rejections under 35 USC 112

Examiner's paragraph 3 consists of a rejection of claim 6 under this heading followed by a rejection of claims 1 to 5. These are considered in turn below, followed by a reply to Examiner's paragraph 4.

35 USC 112 Rejection of Claim 6 under Examiner's paragraph 3

Claim 6 is not a single means claim as it includes distinct structural elements, such as detection system, first comparator, second comparator.

Claim 6 has a body, see for example claim 6 line 6 et seq. “the detection system comprising a first comparator ... and a second comparator...”, which are distinct structural elements.

Claim 6 has been subject to relatively-minor wording amendments and reformatting in part so as to make the above even more apparent.

In view of the above, the undue breadth rejection under 35 USC 112 falls away and the principle of *In re Hyatt* becomes inapplicable to claim 6.

35 USC 112 Rejection of Claims 1 to 5 under Examiner’s paragraph 3

As mentioned above in respect of the Examiner’s paragraph 2, “a decoder for receiving encoded video signals produced by an encoder is a transmitter, the encoder being selectively operative to transmit” is taught on page 2 lines 4 to 5.

Furthermore, “a mode indicator signal indicative of whether or not the last macroblock was encoded is inter-frame prediction format or not” is disclosed on page 2 lines 9 to 10, read in the light of page 3 lines 9 to 11 (which talks of the two modes: one with and one without interframe prediction, and also page 3 lines 17 to 18 where the term “mode indicator signal” is explicitly mentioned.

The disclosure of the specification is addressed to any person skilled in this field and enables such a person to make and use the invention.

35 USC 112 Rejection of Claims 1 to 6 under Examiner’s paragraph 4

In independent claims 1 and 6 the relationship between macroblocks and frames has been clarified. Frames are comprised of macroblocks.

The stand-alone term “blocks” has been replaced by --macroblocks--, an amendment supported by page 3 line 14 of the present application. The relationship between frames and macroblocks has been clarified as explained in the paragraph above.

Claim 6 has been rejected for indefiniteness as having no body. Claim 6 has a body and accordingly is not indefinite. Claim 6 has a body, see for example the current mark-up of claim 6, line 7 et seq “the detection system comprising a first comparator

...and a second comparator...”, where the detection system, first comparator, and second comparator are distinct structural elements.

In Claim 1 line 4 the term “said successive blocks” has been clarified as “..said successive blocks” has been clarified as “..said successive macroblocks”, macroblocks in successive frames having been referred to earlier in the claim.

In Claim 1 the term “the last macroblock” has been clarified as being --the last received macroblock-- (emphasis added).

In Claim 4 line 5, the term “the present macroblock” has been clarified as --a current macroblock--.

In Claim 4, “the corresponding macroblock of an immediately preceding frame” has been clarified to avoid lack of antecedent basis. The relationship between macroblocks and frames was clarified in claim 1 upon which claim 4 depends.

As regards Claim 5, the relationship between macroblocks and frames has been clarified in claim 1 upon which claim 5 depends.

In Claim 6 line 5 the term “said successive blocks” has been clarified as “said successive macroblocks”, macroblocks in successive frames having been referred to earlier in the claim.

In Claim 6 the term “the last macroblock” has been clarified as being --the last received macroblock-- (emphasis added).

In Claim 6 the term “the present macroblock” has been clarified as --a current macroblock--. (See current mark-up, first, fourth, and sixth lines of last paragraph.)

In Claim 6, “the corresponding macroblock of an immediately preceding frame” has been clarified to avoid lack of antecedent basis. The relationship between macroblocks and frames is clarified in Claim 6.

Comments on Examiner’s response to Arguments

In his numbered paragraph 5 the Examiner raised a series of rejections summarized as follows:

- (a) a feature asserted as being a distinguishing feature occurs in the preamble of Claim 1. (Examiners Action page 7 lines 1 to 12)

- (b) “decompression and decoding at a receiver” is not a feature recited in the claims (Examiners Action page 7 line 13 to page 8 line 3)
- (c) features of “encoded video signals...” not given patentable weight as “the recitation occurs in the preamble”. (Page 8 line 4 to page 8 bottom)
- (d) features of “encoded video signals..” not given patentable weight as “the recitation occurs in the preamble” (Page 9 lines 1 to 16).
- (e) Claim 1 not allowable hence claims 2 to 5 neither (Page 9 lines 17 to 19)
- (f) Page 10 lines 1 to 7: This appears inapplicable, being a typographical error as the claims are not 1-7, 9-13, 19, 20, 22, (Gray (US 5086429A) is not among the cited references and we are not aware of a non-final action filed 03/23/2005.

As regards point (a), the feature “indicative of whether or not the last received macroblock was encoded in inter-frame prediction format” must be given patentable weight as the body of the claim depends on the preamble for completeness. The body of the claim involves use of a (received) mode indicator signal for comparison with the indication from a first comparator. The mode indicator signal indicative of whether or not the last received macroblock was encoded is thus to be accorded patentable weight.

As regards point (b), the Examiner is correct that “decompressing and decoding” at a receiver are not recited. However the point remains valid that the present invention involves operation of a receiver, involving comparison of current and previous corresponding macroblocks of frames and comparison of the results with a mode indicator signal received from the transmitter in order to detect errors.

As regards points (c) and (d), the cited passage should be given patentable weight as the body of the claim depends on the preamble for completeness. The body of the claim involves use at the receiver of the mode indicator signal receiver from the transmitter.

As regards point (e), it is respectfully submitted that claim 1 is allowable, and dependent claims 2 to 5 are allowable on the basis of claim 1.

As regards point (f), we believe this was raised by mistake and no further substantive response is required thereto.

35 USC 102(b) Rejections

Claim 1 distinguishes over Urano. According to the present invention, the video signals sent by the transmitter and received by the receiver include a mode indicator signal. It is this mode indicator signal that is compared in the receiver to the output from the first comparator. This is clear in amended claim 1, which requires a mode indicator signal sent by the transmitter, and received by the receiver, “indicative of whether or not the last macroblock was encoded in inter-frame prediction format”.

This clearly distinguishes over Urano which relates to processing at an encoder to produce macroblock information MBT for transmission.

As previously mentioned, claim 1 relates to a receiver whereas the cited portions of Urano relate to transmitters. Specifically, as mentioned in Urano column 3, line 40, Figure 8 shows an encoder, parts of which are described in column 9, lines 21 to 35 and in column 9, lines 50 to 53 in relation to Figure 12, see column 9, lines 37 to 39. Furthermore, column 14, lines 57 to 60, which relate to Figures 17 and 21, see column 12, lines 51 to 52 and column 3, lines 59 to 65, also relates to an encoder.

Also, dispersion value comparator 232 in Figure 12 appears to compare outputs from four different dispersion value calculators 216, 226, 228, 230 so as to choose between three different types of inter-frame prediction compression or none during encoding, see column 10 line 52 to column 11 line 2. This is in contrast to the present invention which concerns operations at a receiver, more specifically comparison of corresponding macroblocks of current and previous frames to determine whether interframe-prediction format was applied or not, and comparison of the result with a mode indicator signal received from the transmitter in order to detect errors.

Furthermore, for completeness, the passage of Urbano cited in column 14, lines 57 to 60 does not teach comparison of that result with a mode indicator signal received from the transmitter and indicative of whether or not inter-frame prediction was applied

in compression before transmission. Also, column 14 lines 57 to 60 relates to a different system to that shown in Figure 12.

Claims 2, 3 and 5 were indicated as being rejected under 35 USC 102. However, no reasoning was provided as to how the extra features referred to in those dependent claims were disclosed by Urano. Nevertheless, this is believed to now be moot, as these claims 2, 3 and 5 now depend on what is believed to be an allowable amended base claim, and so are allowable not least on that basis.

In view of the above, applicants respectfully request reconsideration and allowance. In the event of any fees inadvertently omitted or any improper payment of fees, the Commissioner is hereby authorized to charge or credit Lucent Technologies Deposit Account No.12-2325 to correct the error now or during the pendency of this application.

If the Examiner has any questions or feels that a telephone conversation would be helpful, please contact Martin Finston at 973 386 3147.

Respectfully submitted,

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